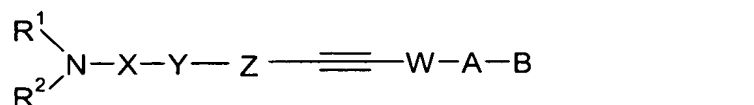


What is claimed is:

1. Alkyne compounds of general formula I



wherein

R^1, R^2 independently of one another denote H, a C_{1-8} -alkyl or C_{3-7} -cycloalkyl group optionally substituted by the group R^{11} , while a $-\text{CH}_2-$ group in position 3 or 4 of a 5-, 6- or 7-membered cycloalkyl group may be replaced by $-\text{O}-$, $-\text{S}-$ or $-\text{NR}^{13}-$, or a phenyl or pyridinyl group optionally mono- or polysubstituted by the group R^{12} and/or monosubstituted by nitro, or

R^1 and R^2 form a C_{2-8} -alkylene bridge wherein

- one or two $-\text{CH}_2-$ groups independently of one another may be replaced by $-\text{CH}=\text{N}-$ or $-\text{CH}=\text{CH}-$ and/or
- one or two $-\text{CH}_2-$ groups may be replaced independently of one another by $-\text{O}-$, $-\text{S}-$, $-\text{SO}_2-$, $-(\text{SO}_2)-$, $-\text{C}=\text{N}-\text{R}^{18}-$, $-\text{C}=\text{N}-\text{O}-\text{R}^{18}-$, $-\text{CO}-$, $-\text{C}(=\text{CH}_2)-$ or $-\text{NR}^{13}-$ in such a way that heteroatoms are not directly connected to one another,

while in the above-defined alkylene bridge one or more H atoms may be replaced by R^{14} , and

while the above-defined alkylene bridge may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in such a way that the bond between the alkylene bridge and the group Cy is formed

- via a single or double bond,
- via a common C atom forming a spirocyclic ring system,
- via two common, adjacent C and/or N atoms forming a fused bicyclic ring system or
- via three or more C and/or N atoms forming a bridged ring system,

X denotes a single bond or a C₁₋₆-alkylene bridge wherein

- a -CH₂- group may be replaced by -CH=CH- or -C≡C- and/or
- one or two -CH₂- groups may be replaced independently of one another by -O-, -S-, -(SO)-, -(SO₂)-, -CO- or -NR⁴- in such a way that in each case two O, S or N atoms or an O and an S atom are not directly connected to one another,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X forming a heterocyclic group, while the bridge X may additionally also be attached to R², including the N-atom attached to R² and X, forming a heterocyclic group, and

two C atoms or one C and one N atom of the alkylene bridge may be joined together by an additional C₁₋₄-alkylene bridge, and

a C atom may be substituted by R¹⁰ and/or one or two C atoms in each case may be substituted with one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system,

and

W, Z independently of one another denote a single bond or a C₁₋₄-alkylene bridge,

while in the group W and/or Z a -CH₂- group not adjacent to the -C≡C group may be replaced by -O or -NR⁵-, and

two adjacent C atoms or one C atom and an adjacent N atom may be joined together by an additional C₁₋₄-alkylene bridge, and

in the alkylene bridge and/or in the additional alkylene bridge a C atom may be substituted by R¹⁰ and/or one or two C atoms independently of one another may be substituted by one or two identical or different C₁₋₆-alkyl groups, while two alkyl groups may be joined together, forming a carbocyclic ring, and

Y denotes one of the meanings given for Cy,

while R¹ may be attached to Y including the group X and the N atom attached to R¹ and X, forming a heterocyclic group fused to Y, and/or

X may be attached to Y forming a carbo- or heterocyclic group fused to Y, and

A denotes one of the meanings given for Cy and

B denotes one of the meanings given for Cy or

C₁₋₆-alkyl, C₁₋₆-alkenyl, C₁₋₆-alkynyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₃₋₇-cycloalkenyl-C₁₋₃-alkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkenyl or C₃₋₇-cycloalkyl-C₁₋₃-alkynyl, wherein one or more C atoms may be mono- or polysubstituted by halogen and/ or may be monosubstituted by hydroxy

or cyano and/ or cyclic groups may be mono- or polysubstituted by R^{20} ,

- Cy denotes a carbo- or heterocyclic group selected from one of the following meanings
- a saturated 3- to 7-membered carbocyclic group,
 - an unsaturated 4- to 7-membered carbocyclic group,
 - a phenyl group,
 - a saturated 4- to 7-membered or unsaturated 5- to 7-membered heterocyclic group with an N, O or S atom as heteroatom,
 - a saturated or unsaturated 5- to 7-membered heterocyclic group with two or more N atoms or with one or two N atoms and an O or S atom as heteroatoms,
 - an aromatic heterocyclic 5- or 6-membered group with one or more identical or different heteroatoms selected from N, O and/or S,

while the above-mentioned 4-, 5-, 6- or 7-membered groups may be attached via two common, adjacent C atoms fused to a phenyl or pyridine ring, and

in the above-mentioned 5-, 6- or 7-membered groups one or two non-adjacent $-CH_2-$ groups may be replaced independently of one another by a $-CO-$, $-C(=CH_2)-$, $-(SO)-$ or $-(SO_2)-$ group, and

the above-mentioned saturated 6- or 7-membered groups may also be present as bridged ring systems with an imino, $(C_{1-4}\text{-alkyl})\text{-imino}$, methylene, $(C_{1-4}\text{-alkyl})\text{-methylene}$ or $\text{di-}(C_{1-4}\text{-alkyl})\text{-methylene}$ bridge, and

the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms with R^{20} , in the case of a phenyl group they may also additionally be monosubstituted with nitro, and/or one or more NH

groups may be substituted with R^{21} ,

- R^4, R^5 independently of one another have one of the meanings given for R^{17} ,
- R^{10} denotes hydroxy, ω -hydroxy- C_{1-3} -alkyl, C_{1-4} -alkoxy, ω -(C_{1-4} -alkoxy)- C_{1-3} -alkyl, carboxy, C_{1-4} -alkoxycarbonyl, amino, C_{1-4} -alkyl-amino, di-(C_{1-4} -alkyl)-amino, cyclo- C_{3-6} -alkyleneimino, amino- C_{1-3} -alkyl, C_{1-4} -alkyl-amino- C_{1-3} -alkyl, di-(C_{1-4} -alkyl)-amino- C_{1-3} -alkyl, cyclo- C_{3-6} -alkyleneimino- C_{1-3} -alkyl, amino- C_{2-3} -alkoxy, C_{1-4} -alkyl-amino- C_{2-3} -alkoxy, di-(C_{1-4} -alkyl)-amino- C_{2-3} -alkoxy, cyclo- C_{3-6} -alkyleneimino- C_{2-3} -alkoxy, aminocarbonyl, C_{1-4} -alkyl-aminocarbonyl, di-(C_{1-4} -alkyl)-aminocarbonyl, cyclo- C_{3-6} -alkyleneimino-carbonyl,
- R^{11} denotes C_{2-6} -alkenyl, C_{2-6} -alkynyl, R^{15} -O, R^{15} -O-CO, R^{15} -CO-O, $R^{16}R^{17}N$, $R^{18}R^{19}N$ -CO or Cy,
- R^{12} has one of the meanings given for R^{20} ,
- R^{13} has one of the meanings given for R^{17} , with the exception of carboxy,
- R^{14} denotes halogen, C_{1-6} -alkyl, C_{2-6} -alkenyl, C_{2-6} -alkynyl, R^{15} -O, R^{15} -O-CO, R^{15} -CO, R^{15} -CO-O, $R^{16}R^{17}N$, $R^{18}R^{19}N$ -CO, R^{15} -O- C_{1-3} -alkyl, R^{15} -O-CO- C_{1-3} -alkyl, R^{15} -O-CO-NH, R^{15} -SO₂-NH, R^{15} -O-CO-NH- C_{1-3} -alkyl, R^{15} -SO₂-NH- C_{1-3} -alkyl, R^{15} -CO- C_{1-3} -alkyl, R^{15} -CO-O- C_{1-3} -alkyl, $R^{16}R^{17}N$ - C_{1-3} -alkyl, $R^{18}R^{19}N$ -CO- C_{1-3} -alkyl or Cy- C_{1-3} -alkyl,
- R^{15} denotes H, C_{1-4} -alkyl, C_{3-7} -cycloalkyl, C_{3-7} -cycloalkyl- C_{1-3} -alkyl, phenyl, phenyl- C_{1-3} -alkyl, pyridinyl or pyridinyl- C_{1-3} -alkyl,
- R^{16} denotes H, C_{1-6} -alkyl, C_{3-7} -cycloalkyl, C_{3-7} -cycloalkyl- C_{1-3} -alkyl, C_{4-7} -cycloalkenyl, C_{4-7} -cycloalkenyl- C_{1-3} -alkyl, ω -hydroxy- C_{2-3} -alkyl, ω -(C_{1-3} -alkyl)- ω -hydroxy- C_{2-3} -alkyl,

4-alkoxy)-C₂₋₃-alkyl, amino-C₂₋₆-alkyl, C₁₋₄-alkyl-amino-C₂₋₆-alkyl, di-(C₁₋₄-alkyl)-amino-C₂₋₆-alkyl or cyclo-C₃₋₆-alkyleneimino-C₂₋₆-alkyl,

R¹⁷ has one of the meanings given for R¹⁶ or denotes phenyl, phenyl-C₁₋₃-alkyl, pyridinyl, dioxolan-2-yl, -CHO, C₁₋₄-alkylcarbonyl, carboxy, hydroxycarbonyl-C₁₋₃-alkyl, C₁₋₄-alkoxycarbonyl, C₁₋₄-alkoxycarbonyl-C₁₋₃-alkyl, C₁₋₄-alkylcarbonylamino-C₂₋₃-alkyl, N-(C₁₋₄-alkylcarbonyl)-N-(C₁₋₄-alkyl)-amino-C₂₋₃-alkyl, C₁₋₄-alkylsulphonyl, C₁₋₄-alkylsulphonylamino-C₂₋₃-alkyl or N-(C₁₋₄-alkylsulphonyl)-N-(C₁₋₄-alkyl)-amino-C₂₋₃-alkyl

R¹⁸, R¹⁹ independently of one another denote H or C₁₋₆-alkyl,

R²⁰ denotes halogen, hydroxy, cyano, C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, hydroxy-C₁₋₃-alkyl, R²²-C₁₋₃-alkyl or has one of the meanings given for R²²,

R²¹ denotes C₁₋₄-alkyl, ω-hydroxy-C₂₋₆-alkyl, ω-C₁₋₄-alkoxy-C₂₋₆-alkyl, ω-C₁₋₄-alkyl-amino-C₂₋₆-alkyl, ω-di-(C₁₋₄-alkyl)-amino-C₂₋₆-alkyl, ω-cyclo-C₃₋₆-alkyleneimino-C₂₋₆-alkyl, phenyl, phenyl-C₁₋₃-alkyl, C₁₋₄-alkyl-carbonyl, C₁₋₄-alkoxy-carbonyl, C₁₋₄-alkylsulphonyl, phenylcarbonyl or phenyl-C₁₋₃-alkyl-carbonyl,

R²² denotes pyridinyl, phenyl, phenyl-C₁₋₃-alkoxy, OHC, HO-N=HC, C₁₋₄-alkoxy-N=HC, C₁₋₄-alkoxy, C₁₋₄-alkylthio, carboxy, C₁₋₄-alkylcarbonyl, C₁₋₄-alkoxycarbonyl, aminocarbonyl, C₁₋₄-alkylamino-carbonyl, di-(C₁₋₄-alkyl)-aminocarbonyl, cyclo-C₃₋₆-alkyl-amino-carbonyl, cyclo-C₃₋₆-alkyleneimino-carbonyl, cyclo-C₃₋₆-alkyleneimino-C₂₋₄-alkyl-aminocarbonyl, C₁₋₄-alkyl-sulphonyl, C₁₋₄-alkyl-sulphinyl, C₁₋₄-alkyl-sulphonylamino, amino, C₁₋₄-alkylamino, di-(C₁₋₄-alkyl)-amino, C₁₋₄-alkyl-carbonyl-amino, cyclo-C₃₋₆-alkyleneimino, phenyl-C₁₋₃-alkylamino,

N-(C₁₋₄-alkyl)-phenyl-C₁₋₃-alkylamino, acetylamino, propionylamino, phenylcarbonyl, phenylcarbonylamino, phenylcarbonylmethylamino, hydroxy-C₂₋₃-alkylaminocarbonyl, (4-morpholinyl)carbonyl, (1-pyrrolidinyl)carbonyl, (1-piperidinyl)carbonyl, (hexahydro-1-azepinyl)carbonyl, (4-methyl-1-piperazinyl)carbonyl, methylenedioxy, aminocarbonylamino or alkylaminocarbonylamino,

while in the above-mentioned groups and residues, particularly in A, B, W, X, Y, Z, R¹ to R⁵ and R¹⁰ to R²², in each case one or more C atoms may additionally be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may additionally be monosubstituted by Cl or Br and/or in each case one or more phenyl rings independently of one another additionally have one, two or three substituents selected from among F, Cl, Br, I, cyano, C₁₋₄-alkyl, C₁₋₄-alkoxy, difluoromethyl, trifluoromethyl, hydroxy, amino, C₁₋₃-alkylamino, di-(C₁₋₃-alkyl)-amino, acetylamino, aminocarbonyl, difluoromethoxy, trifluoromethoxy, amino-C₁₋₃-alkyl, C₁₋₃-alkylamino-C₁₋₃-alkyl- and di-(C₁₋₃-alkyl)-amino-C₁₋₃-alkyl- and/or may be monosubstituted by nitro, and

the H atom of any carboxy group present or an H atom bound to an N atom may each be replaced by a group which can be cleaved in vivo,

the tautomers, the diastereomers, the enantiomers, the mixtures thereof and the salts thereof.

2. Alkyne compounds according to claim 1, characterised in that

R¹, R² independently of one another denote H, a C₁₋₈-alkyl or C₃₋₇-cycloalkyl group optionally substituted by the group R¹¹ or a phenyl group optionally mono- or polysubstituted by the group R¹² and/or monosubstituted by nitro, or

R¹ and R² form a C₂₋₈-alkylene bridge, wherein

- one or two -CH₂- groups independently of one another may be replaced by -CH=N- or -CH=CH- and/or
- one or two -CH₂- groups independently of one another may be replaced by -O-, -S-, -CO-, -C(=CH₂)- or -NR¹³- in such a way that heteroatoms are not directly joined together,

while in the alkylene bridge defined hereinbefore one or more H atoms may be replaced by R¹⁴, and

the alkylene bridge defined hereinbefore may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in such a way that the bond between the alkylene bridge and the group Cy is made

- via a single or double bond,
- via a common C atom forming a spirocyclic ring system,
- via two common adjacent C- and/or N atoms forming a fused bicyclic ring system or
- via three or more C- and/or N atoms forming a bridged ring system,

X denotes a single bond or a C₁₋₆-alkylene bridge, wherein

- a -CH₂- group may be replaced by -CH=CH- or -C≡C- and/or
- one or two -CH₂- groups independently of one another may be replaced by -O-, -S-, -(SO)-, -(SO₂)-, -CO- or -NR⁴- in such a way that in each case two O, S or N atoms or an O and an S atom are not directly joined together,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and

while two C atoms or a C and an N atom of the alkylene bridge may be joined together by an additional C₁₋₄-alkylene bridge, and

a C atom may be substituted by R¹⁰ and/or one or two C atoms in each case may be substituted by one or two identical or different C₁₋₆-alkyl groups, and

W, Z independently of one another denote a single bond or a C₁₋₄-alkylene bridge,

while in the group W and/or Z a -CH₂- group not adjacent to the -C≡C- group may be replaced by -O- or -NR⁵-, and

two adjacent C atoms or a C atom and an adjacent N atom may be joined together by an additional C₁₋₄-alkylene bridge, and

in the alkylene bridge and/or in the additional alkylene bridge a C atom may be substituted by R¹⁰ and/or one or two C atoms independently of one another may be substituted by one or two identical or different C₁₋₆-alkyl groups, and

B has one of the meanings given for Cy or

denotes C₁₋₆-alkyl, C₁₋₆-alkenyl, C₁₋₆-alkynyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₃₋₇-cycloalkenyl-C₁₋₃-alkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkenyl or C₃₋₇-cycloalkyl-C₁₋₃-alkynyl, wherein one or more C atoms may be mono- or polysubstituted by fluorine and cyclic groups may be mono- or polysubstituted by R²⁰,

- R^{10} denotes hydroxy, ω -hydroxy- C_{1-3} -alkyl, C_{1-4} -alkoxy, ω -(C_{1-4} -alkoxy)- C_{1-3} -alkyl, amino, C_{1-4} -alkyl-amino, di-(C_{1-4} -alkyl)-amino, cyclo- C_{3-6} -alkyleneimino, amino- C_{1-3} -alkyl, C_{1-4} -alkyl-amino- C_{1-3} -alkyl, di-(C_{1-4} -alkyl)-amino- C_{1-3} -alkyl, cyclo- C_{3-6} -alkyleneimino- C_{1-3} -alkyl, amino- C_{2-3} -alkoxy, C_{1-4} -alkyl-amino- C_{2-3} -alkoxy, di-(C_{1-4} -alkyl)-amino- C_{2-3} -alkoxy or cyclo- C_{3-6} -alkyleneimino- C_{2-3} -alkoxy,
- R^{13} has one of the meanings given for R^{17} ,
- R^{14} denotes halogen, C_{1-6} -alkyl, R^{15} -O, R^{15} -O-CO, R^{15} -CO, R^{15} -CO-O, $R^{16}R^{17}N$, $R^{18}R^{19}N$ -CO, R^{15} -O- C_{1-3} -alkyl, R^{15} -O-CO- C_{1-3} -alkyl, R^{15} -CO- C_{1-3} -alkyl, R^{15} -CO-O- C_{1-3} -alkyl, $R^{16}R^{17}N$ - C_{1-3} -alkyl, $R^{18}R^{19}N$ -CO- C_{1-3} -alkyl or Cy- C_{1-3} -alkyl,
- R^{15} denotes H, C_{1-4} -alkyl, C_{3-7} -cycloalkyl, C_{3-7} -cycloalkyl- C_{1-3} -alkyl, phenyl or phenyl- C_{1-3} -alkyl,
- R^{17} has one of the meanings given for R^{16} or denotes phenyl, phenyl- C_{1-3} -alkyl, C_{1-4} -alkylcarbonyl, hydroxycarbonyl- C_{1-3} -alkyl, C_{1-4} -alkylcarbonylamino- C_{2-3} -alkyl, N-(C_{1-4} -alkylcarbonyl)-N-(C_{1-4} -alkyl)-amino- C_{2-3} -alkyl, C_{1-4} -alkylsulphonyl, C_{1-4} -alkylsulphonylamino- C_{2-3} -alkyl or N-(C_{1-4} -alkylsulphonyl)-N-(C_{1-4} -alkyl)-amino- C_{2-3} -alkyl
- R^{20} denotes halogen, hydroxy, cyano, C_{1-6} -alkyl, C_{3-7} -cycloalkyl, C_{3-7} -cycloalkyl- C_{1-3} -alkyl, hydroxy- C_{1-3} -alkyl, R^{22} - C_{1-3} -alkyl or has one of the meanings given for R^{22} ,
- R^{22} denotes phenyl, phenyl- C_{1-3} -alkoxy, C_{1-4} -alkoxy, C_{1-4} -alkylthio, carbony, C_{1-4} -alkylcarbonyl, C_{1-4} -alkoxycarbonyl, aminocarbonyl, C_{1-4} -alkylaminocarbonyl, di-(C_{1-4} -alkyl)-aminocarbonyl, cyclo- C_{3-6} -

alkyleneimino-carbonyl, C₁₋₄-alkyl-sulphonyl, C₁₋₄-alkyl-sulphinyl, C₁₋₄-alkyl-sulphonylamino, amino, C₁₋₄-alkylamino, di-(C₁₋₄-alkyl)-amino, cyclo-C₃₋₆-alkyleneimino, phenyl-C₁₋₃-alkylamino, N-(C₁₋₄-alkyl)-phenyl-C₁₋₃-alkylamino, acetylamino, propionylamino, phenylcarbonyl, phenylcarbonylamino, phenylcarbonylmethylamino, hydroxyalkylaminocarbonyl, (4-morpholinyl)carbonyl, (1-pyrrolidinyl)-carbonyl, (1-piperidinyl)carbonyl, (hexahydro-1-azepinyl)carbonyl, (4-methyl-1-piperazinyl)carbonyl, methylenedioxy, aminocarbonylamino or alkylaminocarbonylamino.

3. Alkyne compounds according to claim 1, characterised in that R¹, R² independently of one another represent H, C₁₋₆-alkyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, ω-hydroxy-C₂₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₂₋₃-alkyl, C₁₋₄-alkoxy-carbonyl-C₁₋₄-alkyl, carboxyl-C₁₋₄-alkyl, amino-C₂₋₄-alkyl, C₁₋₄-alkyl-amino-C₂₋₄-alkyl, di-(C₁₋₄-alkyl)-amino-C₂₋₄-alkyl, cyclo-C₃₋₆-alkyleneimino-C₂₋₄-alkyl, pyrrolidin-3-yl, N-(C₁₋₄-alkyl)-pyrrolidinyl, pyrrolidinyl-C₁₋₃-alkyl, N-(C₁₋₄-alkyl)-pyrrolidinyl-C₁₋₃-alkyl, piperidinyl, N-(C₁₋₄-alkyl)-piperidinyl, piperidinyl-C₁₋₃-alkyl, N-(C₁₋₄-alkyl)-piperidinyl-C₁₋₃-alkyl, phenyl, phenyl-C₁₋₃-alkyl, pyridyl or pyridyl-C₁₋₃-alkyl,

while in the above-mentioned groups and residues one or more C atoms may be mono- or polysubstituted by F and/or one or two C atoms may be monosubstituted independently of one another by Cl or Br, and

the phenyl or pyridyl group may be mono- or polysubstituted by the group R¹² defined in claim 1 and/or may be monosubstituted by nitro.

4. Alkyne compounds according to one or more of claims 1 to 3, characterised in that R¹ and R² form an alkylene bridge according to claim 1 in such a way that R¹R²N- denotes a group selected from azetidine, pyrrolidine, piperidine, azepan, 2,5-dihydro-1H-pyrrole, 1,2,3,6-tetrahydro-

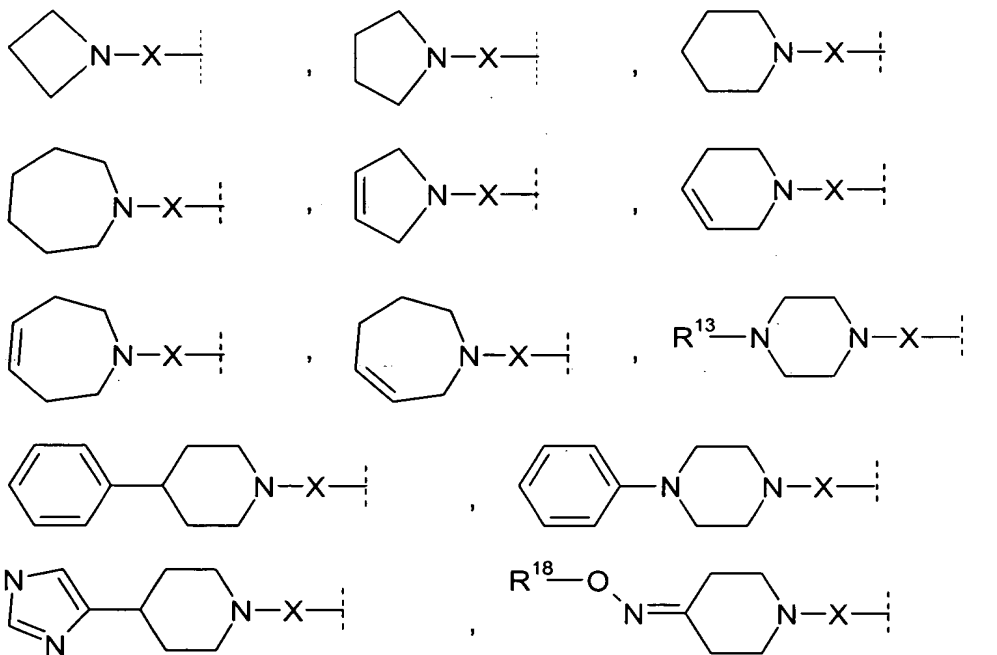
pyridine, 2,3,4,7-tetrahydro-1H-azepine, 2,3,6,7-tetrahydro-1H-azepine, piperazine, wherein the free imine function may be substituted by R^{13} ; piperidin-4-one-oxime, piperidin-4-one-O-C₁₋₄-alkyl-oxime, morpholine and thiomorpholine,

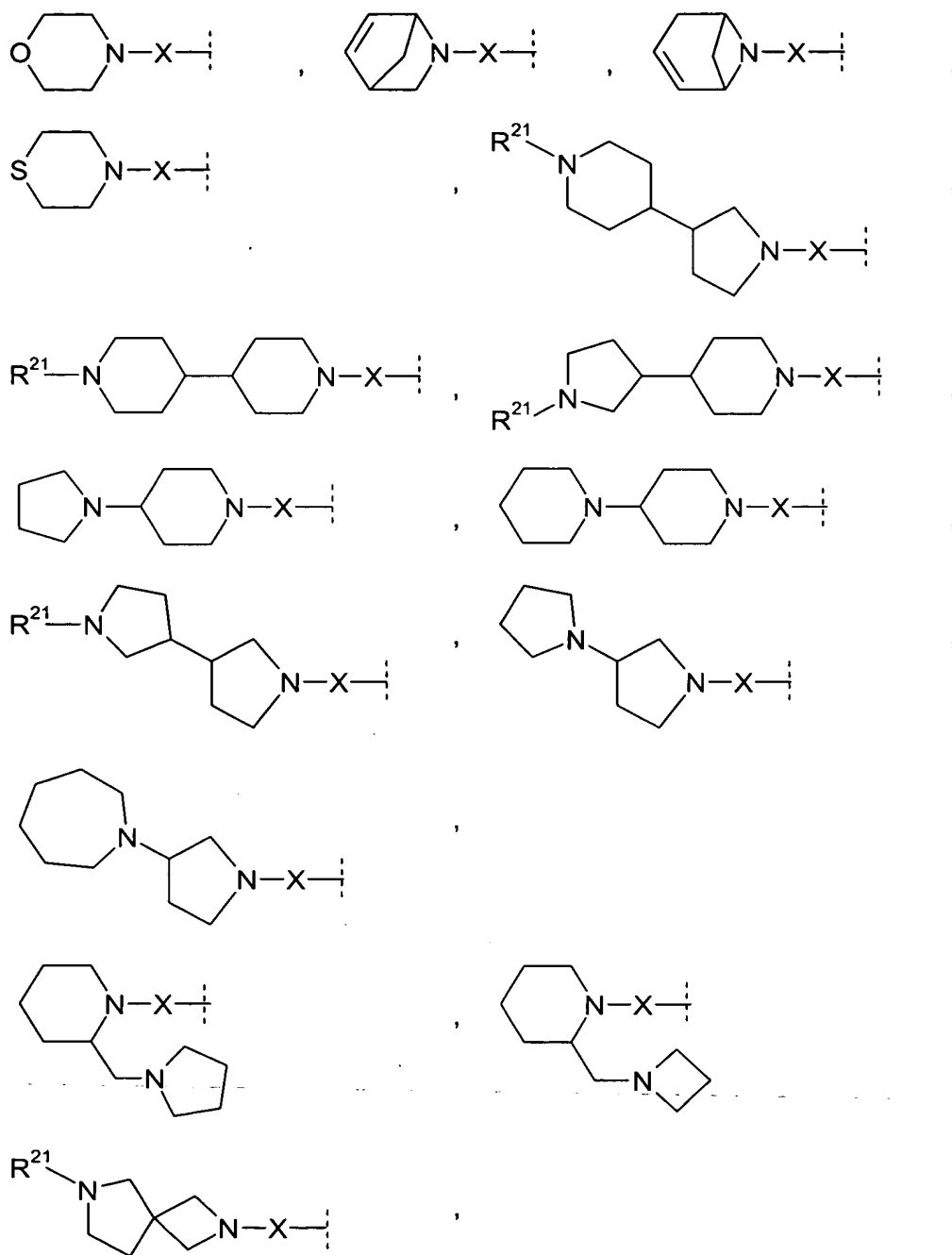
while according to claim 1 one or more H atoms may be replaced by R^{14} , and/ or the alkylene bridge may be substituted by one or two identical or different carbo- or heterocyclic groups Cy in a manner specified in claim 1.

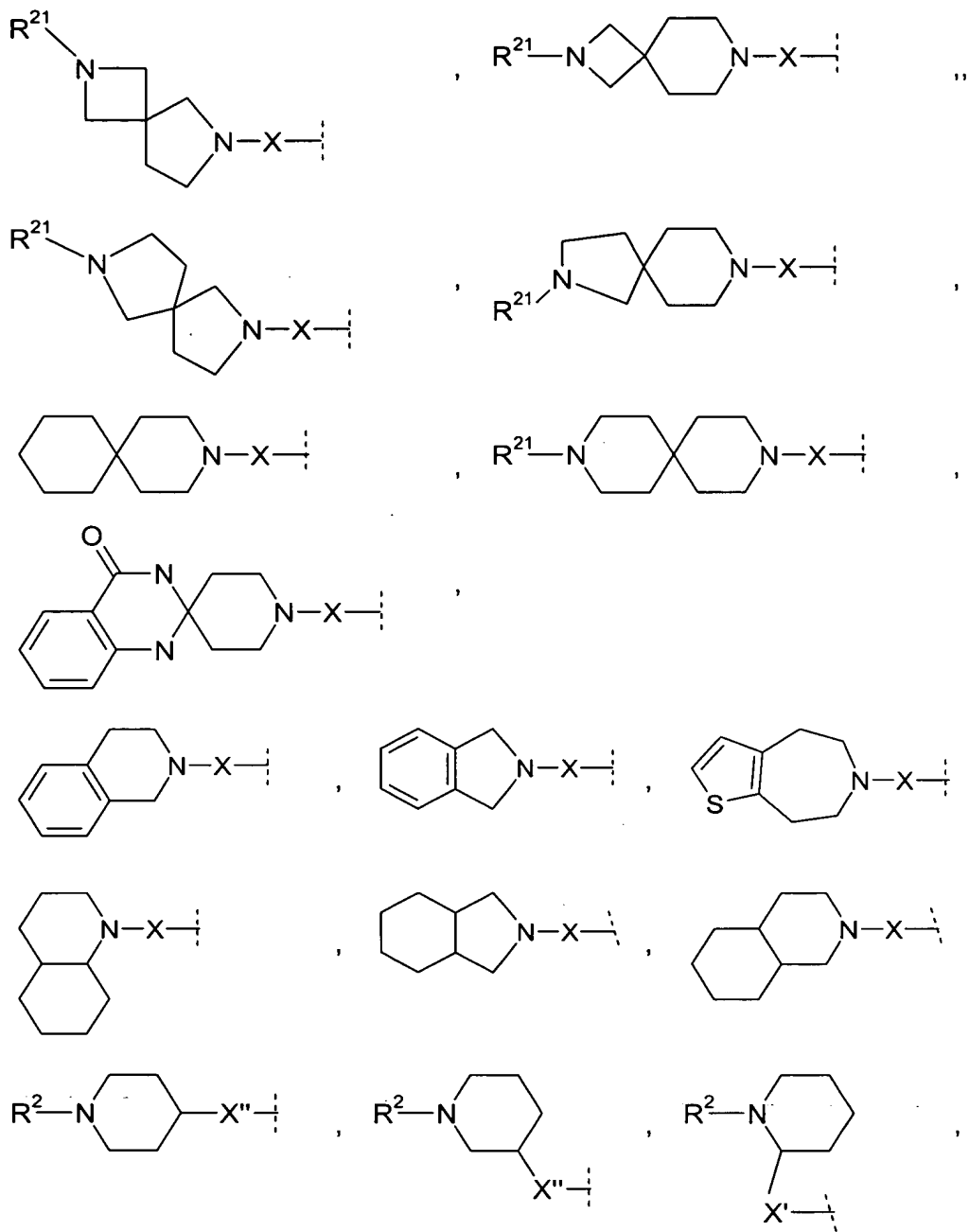
5. Alkyne compounds according to claim 1, characterised in that

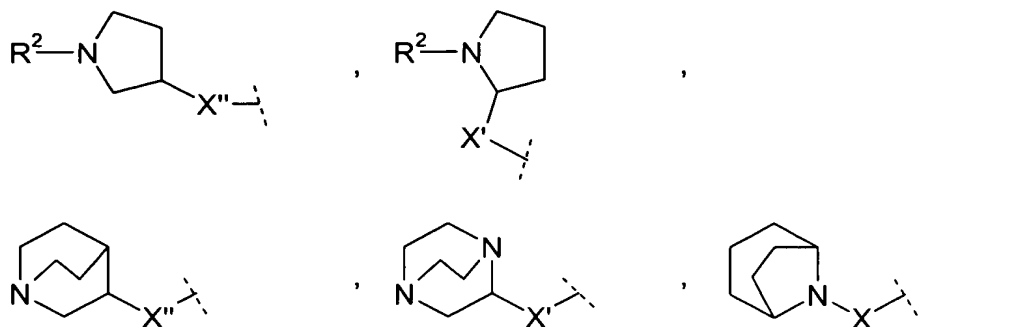


is defined according to one of the following partial formulae









wherein one or more H atoms of the heterocycle formed by the group R^1R^2N - may be replaced by R^{14} and the ring attached to the heterocycle formed by the group R^1R^2N - may be mono- or polysubstituted by R^{20} at one or more C atoms, in the case of a phenyl ring may also additionally be monosubstituted by nitro and

X', X'' independently of one another denote a single bond or C_{1-3} -alkylene and

in the event that the group Y is linked to X' or X'' via a C atom, also denote $-C_{1-3}$ -alkylene-O-, $-C_{1-3}$ -alkylene-NH- or $-C_{1-3}$ -alkylene-N(C_{1-3} -alkyl)-, and

X'' additionally also denotes $-O-C_{1-3}$ -alkylene-, $-NH-C_{1-3}$ -alkylene- or $-N(C_{1-3}$ -alkyl)- C_{1-3} -alkylene- and

in the event that the group Y is linked to X'' via a C atom, also denotes $-NH$ -, $-N(C_{1-3}$ -alkyl)- or $-O$ -,

while in the meanings given for X', X'' hereinbefore, in each case a C atom may be substituted by R^{10} , preferably by a hydroxy, ω -hydroxy- C_{1-3} -alkyl, ω -(C_{1-4} -alkoxy)- C_{1-3} -alkyl and/or C_{1-4} -alkoxy group, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C_{1-6} -alkyl, C_{2-6} -

alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in X', X" independently of one another in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may be monosubstituted by Cl or Br.

6. Alkyne compounds according to claim 1, characterised in that X denotes a single bond or C₁₋₄-alkylene and

in the event that the group Y is linked to X via a C atom, it also denotes -CH₂-CH=CH-, -CH₂-C≡C-, C₂₋₄-alkylenoxy, C₂₋₄-alkylene-NR⁴, C₂₋₄-alkylene-NR⁴-C₂₋₄-alkylene-O, 1,2- or 1,3-pyrrolidinylene or 1,2-, 1,3- or 1,4-piperidinylene, while the pyrrolidinylene and piperidinylene groups are bound to Y via the imino group,

while the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and the bridge X may additionally also be attached to R², including the N atom attached to R² and X, forming a heterocyclic group, and

in X a C atom may be substituted by R¹⁰, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in the above-mentioned groups and residues one or more C atoms may be mono- or polysubstituted by F and/or one or two C atoms independently of one another may be monosubstituted by Cl or Br.

7. Alkyne compounds according to claim 6, characterised in that X denotes -CH₂-, -CH₂-CH₂- or -CH₂-CH₂-CH₂- and

in the event that the group Y is bonded to X via a C atom, it also denotes -CH₂-C≡C- -CH₂-CH₂-O-, -CH₂-CH₂-NR⁴- or 1,3-pyrrolidinylene, while the pyrrolidinylene group is linked to Y via the imino group, and

the bridge X may be attached to R¹ including the N atom attached to R¹ and X, forming a heterocyclic group, and the bridge X may additionally also be attached to R², including the N atom attached to R² and X, forming a heterocyclic group, and

in X a C atom may be substituted by R¹⁰, preferably a hydroxy, ω-hydroxy-C₁₋₃-alkyl, ω-(C₁₋₄-alkoxy)-C₁₋₃-alkyl and/or C₁₋₄-alkoxy group, and/or one or two C atoms in each case may be substituted by one or two identical or different substituents selected from C₁₋₆-alkyl, C₂₋₆-alkenyl, C₂₋₆-alkynyl, C₃₋₇-cycloalkyl, C₃₋₇-cycloalkyl-C₁₋₃-alkyl, C₄₋₇-cycloalkenyl and C₄₋₇-cycloalkenyl-C₁₋₃-alkyl, while two alkyl and/or alkenyl substituents may be joined together, forming a carbocyclic ring system, and

in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms independently of one another may be monosubstituted by Cl or Br.

8. Alkyne compounds according to claim 1, characterised in that W and/or Z independently of one another may denote a single bond, -CH₂-, -CH₂-CH₂-, -CH₂-CH₂-CH₂- or cyclopropylene and

W may additionally also represent $-\text{CH}_2\text{-O-}$, $-\text{CH}_2\text{-CH}_2\text{-O-}$, $-\text{CH}_2\text{-NR}^4\text{-}$ or $-\text{CH}_2\text{-CH}_2\text{-NR}^4\text{-}$ and

Z may additionally also represent $-\text{O-CH}_2\text{-}$, $-\text{O-CH}_2\text{-CH}_2\text{-}$, $-\text{NR}^4\text{-CH}_2\text{-}$ or $-\text{NR}^4\text{-CH}_2\text{-CH}_2\text{-}$,

wherein a C atom may be substituted by R^{10} , preferably by a hydroxy, ω -hydroxy- C_{1-3} -alkyl, ω -(C_{1-4} -alkoxy)- C_{1-3} -alkyl- and/or C_{1-4} -alkoxy group, and/or one or two C atoms independently of one another may each be substituted by one or two identical or different C_{1-4} -alkyl groups, and

in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms may be monosubstituted independently of one another by Cl or Br.

9. Alkyne compounds according to claim 8, characterised in that W and/or Z independently of one another denote a single bond or are selected from among the bridges $-\text{CH}_2\text{-}$, $-\text{CH}_2\text{-CH}_2\text{-}$, $-\text{CH}_2\text{-CH}(\text{CH}_3)\text{-}$, $-\text{CH}_2\text{-C}(\text{CH}_3)_2\text{-}$, $-\text{CH}(\text{CH}_3)\text{-CH}_2\text{-}$, $-\text{C}(\text{CH}_3)_2\text{-CH}_2\text{-}$, cyclopropylene, $-\text{CH}_2\text{-CH}(\text{R}^{10})\text{-}$, $-\text{CH}(\text{R}^{10})\text{-CH}_2\text{-}$ and

W may additionally also represent $-\text{CH}_2\text{-O-}$ or $-\text{CH}_2\text{-NR}^4\text{-}$ and

Z may additionally also represent $-\text{O-CH}_2\text{-}$ or $-\text{NR}^4\text{-CH}_2\text{-}$,

wherein R^4 has the meanings given in claim 1, preferably -H, methyl, ethyl or propyl, and

wherein R^{10} has the meanings given in claim 1, preferably -OH,

N-pyrrolidinyl, amino-ethoxy, C₁₋₄-alkyl-amino-ethoxy, di-(C₁₋₄-alkyl)-amino-ethoxy, and

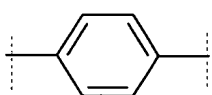
in each case one or more C atoms may be mono- or polysubstituted by F and/or in each case one or two C atoms may be monosubstituted independently of one another by Cl or Br.

10. Alkyne compounds according to claim 1, characterised in that the group Y is selected from among the bivalent cyclic groups phenyl, naphthyl, thienyl, benzothienyl, tetrahydronaphthyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, indolyl, dihydroindolyl, dihydroindolonyl, quinoliny, tetrahydroquinoliny, isoquinoliny, tetrahydro-isoquinoliny, indazolyl, benzimidazolyl, benzofuranyl or benzoxazolyl,

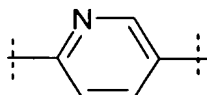
while the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms by R²⁰, and in the case of a phenyl group may also additionally be monosubstituted by nitro, and/or may be substituted by R²¹ at one or more N atoms,

while R¹ may be attached to Y and/or X may be attached to Y as specified in claim 1.

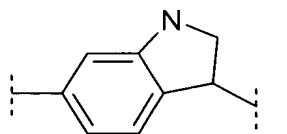
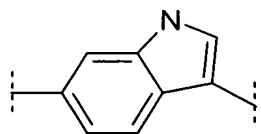
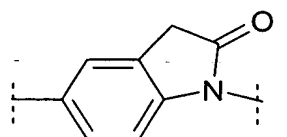
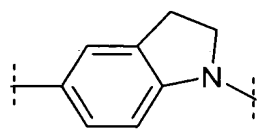
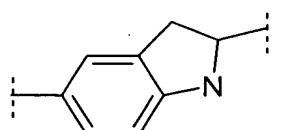
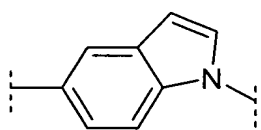
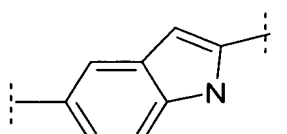
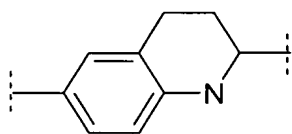
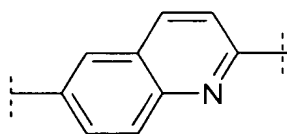
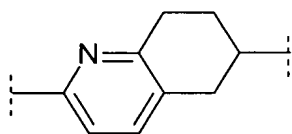
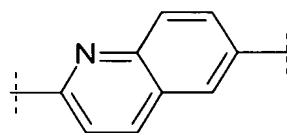
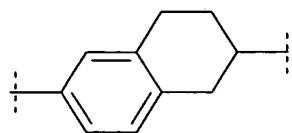
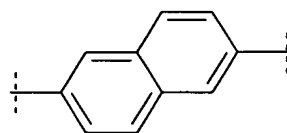
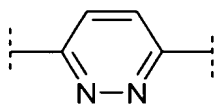
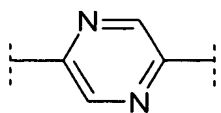
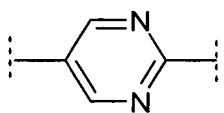
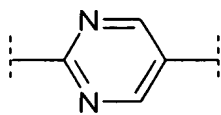
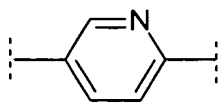
11. Alkyne compounds according to claim 1, characterised in that the group Y is selected from among the bivalent cyclic groups

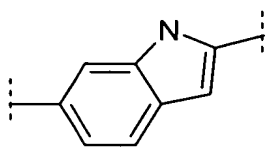


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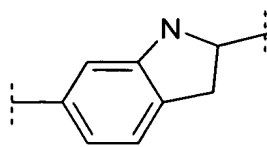


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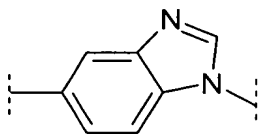




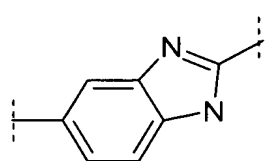
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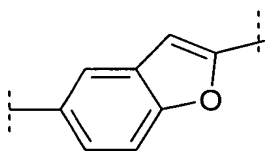
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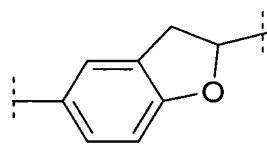
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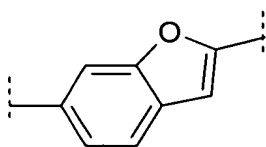
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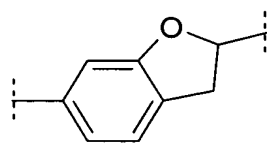
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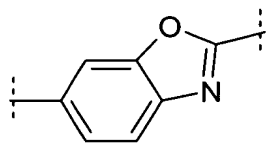
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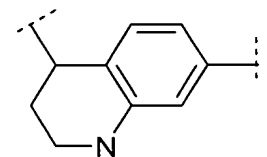
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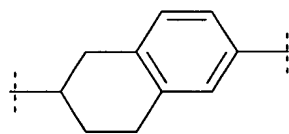
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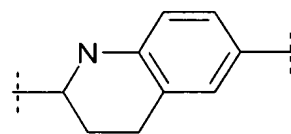
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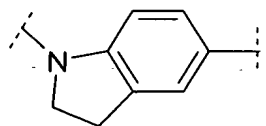
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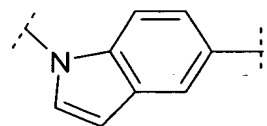
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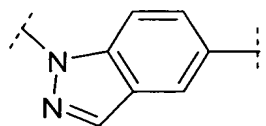
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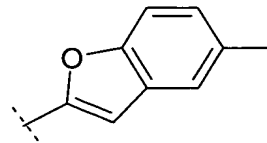
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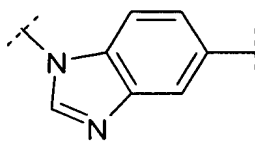
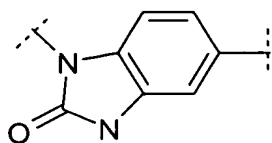
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while the above-mentioned cyclic groups may be mono- or polysubstituted by R^{20} at one or more C atoms, and in the case of a phenyl group may also additionally be monosubstituted by nitro, and/or one or more NH groups may be substituted by R^{21} .

12. Alkyne compounds according to claim 1, characterised in that the group A is selected from among the bivalent cyclic groups phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl,

while the above-mentioned cyclic groups may be mono- or polysubstituted at one or more C atoms by R^{20} , and in the case of a phenyl ring may also additionally be monosubstituted by nitro, and/or one or more NH groups may be substituted by R^{21} .

13. Alkyne compounds according to claim 1, characterised in that the group B is selected from the first group comprising phenyl, thienyl and furanyl or

from the second group comprising C_{1-6} -alkyl, C_{1-6} -alkenyl, C_{1-6} -alkynyl, C_{3-7} -cycloalkyl- C_{1-3} -alkyl, C_{3-7} -cycloalkenyl- C_{1-3} -alkyl, C_{3-7} -cycloalkyl- C_{1-3} -alkenyl, C_{3-7} -cycloalkyl- C_{1-3} -alkynyl, wherein one or more C atoms may be mono- or polysubstituted by fluorine, and

the above-mentioned cyclic groups may be mono- or polysubstituted by R^{20} at one or more C atoms, and in the case of a phenyl group may also additionally be monosubstituted by nitro.

14. Alkyne compounds according to claim 1, characterised in that

R^{20} denotes F, Cl, Br, I, OH, cyano, methyl, difluoromethyl, trifluoromethyl, ethyl, n-propyl, iso-propyl, methoxy, difluoromethoxy, trifluoromethoxy, ethoxy, n-propoxy or isopropoxy, while any substituents R^{20} occurring repeatedly may have identical or different meanings.

15. Alkyne compounds according to claim 1 selected from the formulae

- (1) 5-(4-chloro-phenyl)-2-[5-(2-pyrrolidin-1-yl-ethoxy)-pyridin-2-yl-ethynyl]-pyridine
- (2) [(R)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-pyrrolidin-2-yl]-methanol
- (3) 5-(4-chloro-phenyl)-2-[2-(4-methyl-piperidin-1-ylmethyl)-benzofuran-5-ylethynyl]-pyridine
- (4) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1,3-dihydro-benzimidazol-2-one
- (5) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-yl]-methanol
- (6) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-3-ol
- (7) N-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenyl}-2-pyrrolidin-1-yl-propionamide
- (8) 1-{3-[5-(4-chloro-phenyl)-pyridin-2-yl]-prop-2-ynyl}-5-pyrrolidin-1-ylmethyl-1H-indole
- (9) 2-[4-(4-azetidin-1-ylmethyl-phenyl)-but-1-ynyl]-5-(4-chloro-phenyl)-pyridine

- (10) 5-(4-chloro-phenyl)-2-[4-(4-piperidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (11) 5-(4-bromo-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (12) 2-[(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-amino]-ethanol
- (13) 5-(4-chloro-phenyl)-2-{4-[4-((S)-2-methoxymethyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine
- (14) 5-(4-chloro-phenyl)-2-{4-[2-(4-propyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (15) 5'-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-3-pyrrolidin-1-yl-3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl
- (16) 5-(4-chloro-phenyl)-2-{4-[4-(2-methyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine
- (17) 3-(4-chloro-phenyl)-6-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridazine
- (18) 5-(4-chloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (19) 5-(4-chloro-phenyl)-2-{4-[2-(2,6-dimethyl-piperidin-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine
- (20) methyl 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzoate
- (21) 5-(4-chloro-phenyl)-2-[3-methyl-4-(2-piperidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (22) 5-(4-chloro-phenyl)-2-[3-methyl-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (23) 5-(4-chloro-phenyl)-2-{4-[4-(4-methyl-piperidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine

- (24) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-ol
- (25) 5-(4-chloro-phenyl)-2-{3-methyl-4-[2-(2-pyrrolidin-1-ylmethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (26) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-(2-piperidin-1-yl-ethyl)-amine
- (27) 4-(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-morpholine
- (28) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-piperidin-4-yl-amine
- (29) 5-(4-chloro-phenyl)-2-[3-(4-pyrrolidin-1-ylmethyl-phenoxy)-prop-1-ynyl]-pyridine
- (30) 6-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-pyrrolidin-1-ylmethyl-1,2,3,4-tetrahydro-quinoline
- (31) (1-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-pyrrolidin-3-yl)-dimethyl-amine
- (32) [(S)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-2-yl]-methanol
- (33) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-phenylamine
- (34) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-(2-pyrrolidin-1-yl-propyl)-amine
- (35) 1-(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-pyrrolidin-3-ylamine
- (36) 2-[3-bromo-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-5-(4-chloro-phenyl)-pyridine
- (37) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-azepan
- (38) 5-(4-chloro-phenyl)-2-(6-pyrrolidin-1-ylmethyl-naphthalen-2-ylethynyl)-pyridine

- (39) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-N-methyl-2-(2-pyrrolidin-1-yl-ethoxy)-benzamide
- (40) (2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-cyclopropylmethyl-propyl-amine
- (41) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-4-methyl-piperidin-4-ol
- (42) 5-(4-chloro-phenyl)-2-{3-methyl-4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (43) 5-(4-chloro-phenyl)-3-fluoro-2-{4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (44) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-indole
- (45) {4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenyl}-(2-pyrrolidin-1-yl-ethyl)-amine
- (46) methyl [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-acetate
- (47) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-methyl-(2-pyrrolidin-1-yl-ethyl)-amine
- (48) tert-butyl [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-pyrrolidin-3-yl]-carbaminate
- (49) 5-(4-chloro-phenyl)-2-[3-methoxy-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (50) 5-(4-chloro-phenyl)-2-[4-(2-piperidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (51) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-indazole
- (52) 2-[4-(2-azetidin-1-yl-ethoxy)-phenylethynyl]-5-(4-chloro-phenyl)-pyridine
- (53) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzaldehyde O-methyl-oxime

- (54) 1'-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-[1,3']bipyrrolidinyl
- (55) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-(1-methyl-piperidin-4-yl)-amine
- (56) 5-(4-chloro-phenyl)-2-[3-chloro-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (57) (S)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-ol
- (58) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-pyridin-2-yl-amine
- (59) 5-(4-bromo-phenyl)-2-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (60) N-[1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ylmethyl]-N-methyl-acetamide
- (61) 5-(2,4-dichloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (62) 5-(4-chloro-phenyl)-2-{4-[2-(4-ethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (63) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-methanol
- (64) 5-(4-chloro-phenyl)-2-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (65) 5-(4-chloro-phenyl)-2-{4-[2-(3,6-dihydro-2H-pyridine-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (66) 5-(4-chloro-phenyl)-2-{4-[2-(2-methyl-pyrrolidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (67) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-cyclopropylmethyl-amine
- (68) 5-(4-chloro-phenyl)-2-{4-[4-(4-pyrrolidin-1-yl-piperidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine

- (69) 5-(4-methoxy-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (70) 5-(3,4-difluoro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (71) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-4-methyl-piperidin-4-ol
- (72) 5-(4-chloro-phenyl)-2-{4-[4-((R)-2-methoxymethyl-pyrrolidin-1-ylmethyl)-phenyl]-but-1-ynyl}-pyridine
- (73) 6-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-pyrrolidin-1-ylmethyl-quinoline
- (74) 1-(4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-4-methyl-piperazine
- (75) {5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-pyridin-2-yl}-(2-pyrrolidin-1-yl-ethyl)-amine
- (76) 5-(4-chloro-phenyl)-2-(3-methyl-4-{2-[4-(pyridin-2-yloxy)-piperidin-1-yl]-ethoxy}-phenylethynyl)-pyridine
- (77) 5-(4-chloro-phenyl)-2-{4-[2-(3,6-dihydro-2H-pyridine-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine
- (78) (R)-1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-ol
- (79) 1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-piperidin-4-ol
- (80) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ol
- (81) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-4-phenyl-piperidin-4-ol
- (82) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-[4,4']bipiperidinyl
- (83) 5-(4-chloro-phenyl)-2-[3-ethynyl-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine

- (84) 5-(3,4-dichloro-phenyl)-2-[4-(4-pyrrolidin-1-ylmethyl-phenyl)-but-1-ynyl]-pyridine
- (85) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-4-methyl-piperidin-4-ylamine
- (86) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-(2-pyrrolidin-1-yl-ethoxy)-benzaldehyde-oxime
- (87) 5-(4-chloro-phenyl)-2-{4-[2-(2,6-dimethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (88) 5-(4-chloro-phenyl)-2-(4-{2-[4-(1H-imidazol-4-yl)-piperidin-1-yl]-ethoxy}-3-methyl-phenylethynyl)-pyridine
- (89) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-2-yl]-methanol
- (90) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-methyl-pyridin-2-ylmethyl-amine
- (91) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-carboxylic acid amide
- (92) 2-[(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-methyl-amino]-ethanol
- (93) 5-(4-chloro-phenyl)-2-{4-[2-(4-methyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (94) {2-[1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-ethyl}-diethyl-amine
- (95) 5-(4-chloro-phenyl)-2-{4-[2-(2,4,6-trimethyl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (96) 5-(4-chloro-phenyl)-2-{4-[2-(3,5-dimethyl-piperidin-1-yl)-ethoxy]-3-methyl-phenylethynyl}-pyridine
- (97) cis-2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-decahydro-isoquinoline
- (98) 6-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-2-methyl-2,6-diaza-spiro[3.4]octane

- (99) 1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-4-methyl-piperidin-4-ol
- (100) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-pyrrolidin-3-yl]-dimethyl-amine
- (101) 5-(4-chloro-phenyl)-2-[3-fluoro-4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridine
- (102) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-piperidin-4-yl]-cyclopentyl-methyl-amine
- (103) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-2,3-dihydro-1H-indole
- (104) 5-(4-chloro-phenyl)-2-{4-[2-(4-pyrrolidin-1-yl-piperidin-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (105) 5-(4-chloro-phenyl)-2-{4-[2-(2,5-dihydro-pyrrol-1-yl)-ethoxy]-phenylethynyl}-pyridine
- (106) [1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-piperidin-4-ylmethyl]-dimethyl-amine
- (107) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-4-methyl-piperazine
- (108) (4-{4-[5-(4-chloro-phenyl)-pyridin-2-yl]-but-3-ynyl}-benzyl)-pyridin-2-ylmethyl-amine
- (109) 1-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-spiro[piperidin-4,2'(1H')-quinazoline]-4'(3'H)one
- (110) 4-{[(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-methyl-amino]-methyl}-phenol
- (111) 5-(4-chloro-phenyl)-2-[4-(3-piperidin-1-yl-pyrrolidin-1-yl)-phenylethynyl]-pyridine
- (112) 5-(4-chloro-phenyl)-2-[2-(2-pyrrolidin-1-yl-ethoxy)-pyridin-5-yl-ethynyl]-pyridine
- (113) 3-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy}-ethyl)-9-methyl-3,9-diaza-spiro[5.5]undecane

- (114) 2-(4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-2-methyl-phenoxy)-ethyl)-diisopropyl-amine
- (115) 5-(4-chloro-phenyl)-2-[4-(3-pyrrolidin-1-yl-propyl)-phenylethynyl]-pyridine
- (116) 2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-1,2,3,4-tetrahydro-isoquinoline
- (117) 3-(4-chloro-phenyl)-6-[4-(2-pyrrolidin-1-yl-ethoxy)-phenylethynyl]-pyridazine
- (118) (R)-1-(2-{5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-indol-1-yl}-ethyl)-pyrrolidin-3-ol
- (119) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-3-methyl-1-(2-pyrrolidin-1-yl-ethyl)-1,3-dihydro-benzimidazol-2-one
- (120) 5-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-(2-pyrrolidin-1-yl-ethyl)-1H-benzimidazole
- (121) 2-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-1-methyl-5-pyrrolidin-1-ylmethyl-1H-benzimidazole
- (122) trans-2-(2-{4-[5-(4-chloro-phenyl)-pyridin-2-ylethynyl]-phenoxy}-ethyl)-decahydro-isoquinoline

including the tautomers, the diastereomers, the enantiomers, the mixtures thereof and the salts thereof.

- 16 Physiologically acceptable salts of the alkyne compounds according to claim 1.
- 17. Composition, comprising at least one alkyne compound according to claim 1, optionally together with one or more inert carriers and/or diluents.
- 18. Use of at least one alkyne compound according to claim 1 for influencing the eating behaviour of a mammal.

19. Use of at least one alkyne compound according to claim 1 for reducing the body weight and/ or for preventing an increase in the body weight of a mammal.
20. Use of at least one alkyne compound according to claim 1 for modulating MCH activity in a mammal by providing a MCH receptor antagonist.
21. Use of at least one alkyne compound according to claim 1 for the prevention and/or treatment of urinary problems, such as for example urinary incontinence, overactive bladder, urgency, nycturia and enuresis, in a mammal.